

CLAIMS  
(as originally filed)

1. A method for processing substances in the reservoir (3) of a microdosing device (1) adapted for microdroplet delivery, comprising the steps:

- movement of a solid carrier material with a binding-active surface in the reservoir (3); and
- binding of the substance on the surface of the carrier material.

2. A method according to claim 1 in which for the purpose of collecting substances in the reservoir (3) in turn repeated uptakes into the reservoir of a solution or suspension of the substance, and binding of the substance to the carrier material, take place.

3. A method according to claim 1 or 2 in which an elution agent is taken up in the reservoir (3) of the dosing device, with the substance bound to the carrier material being separated by said elution agent.

4. A method according to one of the preceding claims in which the carrier material comprises magnetic particles (7) whose movement takes place under the influence of a changeable magnetic field.

5. A method according to claim 4 in which the changeable magnetic field is formed by the simultaneous movement of permanent magnets (81, 82) in relation to the reservoir (3).

6. A method according to claim 4 in which the changeable magnetic field is generated by electromagnets or microsuperconductors.

7. A method according to one of claims 1 to 3 in which the carrier material comprises a carrier pad (9) whose movement takes place with a mechanical actuating element.

8. A method according to one of the preceding claims in which a microdispenser (1) or a micropipette is used as a dosing device.

9. A method according to one of the preceding claims in which processing of the substance comprises concentration, purification, preparation and/or synthetisation.

10. A method according to claim 1 in which the volume of the reservoir (3) is less than 500 µl.

11. A device for processing substances, comprising a microdosing device (1) with a reservoir (3), in which a carrier material (7, 9) with binding active surface is movably arranged, with a drive device being provided for holding and/or moving the carrier material in the reservoir (3) and with the dosing device (1) being adapted for microdroplet delivery.

12. A device according to claim 11 in which the microdosing device is a micropipette or a microdispenser (1).

13. A device according to claim 11 or 12 in which the carrier material comprises magnetic particles (7).

14. A device according to claim 13, in which the drive device comprises a magnet device (8).

15. A device according to claim 14 in which the magnet device (8) comprises at least one permanent magnet.

16. A device according to one of claims 11 or 12 in which the carrier material comprises a porous carrier pad (9).

17. A device according to one of claims 11 to 16 comprising a multitude of microdosing devices each with a reservoir, and a drive device comprise a multitude of magnet devices (8) or carrier pads (9).
18. A device according to claim 17 in which the multitude of microdosing devices comprise a row of piezoelectric microdispensers.
19. A device according to claim 11 in which the volume of the reservoir (3) is less than 500  $\mu$ l.

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